## A NEW CARDITA FROM THE ALEUTIAN ISLANDS AND A NEW EPITONIUM FROM SOUTHERN CALIFORNIA

BY
GEORGE WILLETT

Los Angeles Museum

During the summer of 1926 the writer spent several days on Umnak Island, west of Unalaska Island, in the Aleutian group, and in spare moments a small collection of shells was made. Among these were examples of a small *Cardita* which eluded identification with any known species. Many valves of this shell were found on the beaches along the south shore of Umnak Island, together with valves of *Astarte rollandi* Bernardi. As this shore is entirely open and exposed to heavy swells, most specimens found were badly worn, but careful search produced some fairly good material, though all the valves were disconnected.

Owing to the fact that the little *Cardita* was so common in the beachdrift, it seemed unlikely that it represented an unknown species. Therefore, though the writer had been unable to identify it, he was very hesitant to believe it undescribed. Dr. W. P. Woodring, of the U. S. Geological Survey, kindly volunteered to compare it with material in the U. S. National Museum collection and examples were sent on to him for that purpose. In a letter of recent date he states that he has been unable to find a similar shell in the National Museum. Therefore it would seem that it requires a name, which may be as follows:

## Cardita umnaka sp. nov.

Plate 5, figs. 1a, b, 2a, b

Description.—Shell small, inequilateral, somewhat oblique; with about forty narrow, raised, cord-like radial ribs, which run to the margin of the shell, but are frequently interrupted by the rough growth lines; interspaces about the same width as the ribs. Shell covered by a brown epidermis, which is much darker in adult specimens than it is in younger ones. The ribs, owing to their fineness are not visible through this epidermis, but may be seen only where it has been worn away, which is the case in the umbonal region of all specimens examined.

The valves designated as the type pair, No. 1034, collection of the

Los Angeles Museum, were selected from a large number of single valves collected by the writer on Umnak Island, Alaska, July, 1926, and are figured on Plate 5. Paratypes are in the U. S. National Museum, Academy of Natural Sciences of Philadelphia, San Diego Society of Natural History (Nos. 391, 392), University of California at Los Angeles (Cat. No. 1406), and the collection of the writer.

The type measures in millimeters: height, 10.7; length, 10.3; diameter, 6.6. The largest valve found has a height of 11.7 and a length of 11.2 millimeters.

This species differs from all known west coast Carditas in the greater number and fineness of the radial ribs. No living specimens having been taken, it is not possible to state whether the epidermis is ever entire on adult shells. If a specimen should be entirely covered by the epidermis, the ribs would be visible only on the inner margin.

During recent years considerable work has been done on the shells of the genus *Epitonium* and it has been generally believed by southern California collectors that our local shore and shallow water species were fairly well known. Therefore it was a surprise to the writer to find, while dredging in twenty fathoms off San Pedro, California, two specimens of a member of this genus that differ decidedly from any of our known species. This may be known as:

## Epitonium (Nitidiscala) pedroanum sp. nov. Plate 5, fig. 3

Description of type.—Shell small, slender, thin, buffy-white; with ten whorls exclusive of the (lost) nucleus; varices fifteen, very low, slightly reflected, with no perceptible shoulder, and almost encircling the spire; whorls and base rounded; aperture oval, somewhat angled. Length, 11.7; maximum diameter, 3.7.

Type No. 1036, collection of the Los Angeles Museum. The type and another smaller specimen were collected by G. Willett in 20 fathoms off San Pedro, California, September 9, 1931. Paratype in the collection of the writer.

This species does not closely resemble any west coast Epitonium

known to the writer. The varices in form are somewhat similar to those of *E. columbianum* Dall and the unshouldered variety of *E. sawinae* which Dr. Dall called *catalinense*. The varices of *pedroanum*, however, are fewer in number than in either of these species, and the shell is much more slender and of a different color. Furthermore *pedroanum* is much smaller than *columbianum* and longer than *sawinae*.